

IMPRINT STAMP

ABSTRACT

A method of fabricating an imprint stamp is disclosed. The imprint stamp includes a plurality of layers of material that are deposited in a deposition order. After deposition, each layer is patterned and then etched to form a portion of an application specific imprint pattern. The portion includes variations in a topography of the layer. The application specific imprint pattern comprises a plurality of features that are defined by the variations in the topographies of all of the layers of material that were deposited, patterned, and etched. The imprint stamp can be used in a soft-lithography process by pressing the application specific imprint pattern into a mask layer in which the application specific imprint pattern is replicated.

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